

AMENDMENTS TO THE CLAIMS:

Please replace the claims with the claims provided in the listing below wherein status, amendments, additions and cancellations are indicated.

1. - 20. (Canceled)

21. (New) Pockels cell comprising an assembly of two spaced apart parallelpiped RTP crystals located one behind the other in a predetermined direction of radiation which is to be applied to the Pockels cell, the crystals being oriented in the direction of radiation to provide thermal compensation relative to each other and each being of rectangular cross-section transverse of the direction of radiation, electrodes on two opposite faces of each of the crystals, said faces of one of the crystals being rotated 90° relative to said faces of the other of the crystals about an axis parallel to the direction of radiation, and flexible, electrically insulating, high voltage-resistant plastic or rubber mats which conduct heat well superposed on exterior faces of the electrodes and a cooling body substantially surrounding said assembly comprised of the crystals, the electrodes and the mats, forming a space for receiving said assembly and having surfaces adjacent the mats.

22. (New) Pockels cell according to claim 21, wherein the cooling body comprises two shells attachable to each other to form said cooling body substantially surrounding said assembly, said receiving space being defined by respective mutually contiguous spaces in said half shells.

23. (New) Pockels cell according to claim 22, further comprising respective pairs of planar support surfaces in said spaces in said half shells, said

support surfaces of each said pair extending parallel and perpendicular to the radiation direction and perpendicular to each other, one of the support surfaces of each said pair facing an electrode-free face of one of the crystals and the other of the support surfaces of the same pair facing the mat on the electrode on another of the faces of the same crystal, each crystal thereby having respective faces of the supports facing electrode-free faces and facing electrodes on faces of the crystals.

24. (New) Pockels cell according to claim 22, wherein the shells are substantially identical and include channels for coolant extending through the half shells substantially parallel to the direction of radiation, the channels are of substantially the same configuration and same location in each of the half shells and the channels are equidistantly spaced in the cooling body as assembled from the two shells.

25. (New) Pockels cell according to claim 24, wherein two of said channels are in each of the half shells.

26. (New) Pockels cell according to claim 25, wherein the channels are arranged for flow of coolant in the channels in opposing directions.

27. (New) Pockels cell according to claim 21, wherein the body comprises copper.

28. (New) Pockels cell according to claim 21, wherein the body comprises a hollow cylinder.

29. (New) Pockels cell according to claim 21, wherein the mats are adhered to the electrodes by adhesive that is highly heat conducting.

30. (New) Pockels cell according to claim 23, wherein the support surfaces which face the mats are adhered to said mats by adhesive.

31. (New) Pockels cell according to claim 23, wherein the support surfaces which face the mats are adhered to the mats by tape having adhesive on opposite faces thereof, the tape being electrically insulating, high voltage-resistant and highly heat conducting.

32. (New) Pockels cell according to claim 21, wherein the mats are superposed also on electrode-free faces of the crystals.

33. (New) Pockels cell according to claim 21, wherein the electrodes are two in number, each of the electrodes being on one face of each of the crystals.

34. (New) Pockels cell according to claim 32, wherein the electrodes are identical.